

Appln No. 10/748,197
Amdt date January 7, 2011
Reply to Office action of October 13, 2010

REMARKS/ARGUMENTS

Claims 1-3, 5, 6, 8, 12, 14, 20-22, and 24-28 remain in the present application, of which claims 1, 8, 14, and 20 are independent. Claims 4, 7, 9-11, 13, 15-19, and 23 were previously canceled. Claims 1-3, 5, 6, 8, 14, 20-22, and 24-28 are amended herein. No new matter has been added. Applicants respectfully request reconsideration and allowance of claims 1-3, 5, 6, 8, 12, 14, 20-22, and 24-28.

Rejection of Claims 1-3, 5, 6, 8, 12, 20-22, and 24-28 under 35 U.S.C. § 112, second paragraph

Claims 1-3, 5, 6, 8, 12, 20-22, and 24-28 were rejected under 35 U.S.C. § 112, second paragraph, on page 2 of the Office action as allegedly being indefinite because:

The word "type" makes the battery indefinite (MPEP 2173.05(b)).

Although Applicants do not agree with the Examiner's rejection, in the interest of advancing prosecution, claims 1, 8, and 20 now recite, in relevant part: "a battery unit" and claims 2, 3, 5, 6, 12, 21, 22, and 24-28 now recite, in relevant part: "the battery unit". Therefore, Applicants respectfully request that the rejections of claims 1-3, 5, 6, 8, 12, 20-22, and 24-28 be withdrawn.

Rejection of Claims 1-3, 5, 6, 8, 12, 14, 20-22, and 24-28 under 35 U.S.C. § 103(a)

Claims 1-3, 8, 14, 20, and 24-26 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Narukawa et al. (U.S. Pat. No. 5,834,133, hereinafter Narukawa '133) in view of Vourlis (U.S. Pat. No. 6,054,233, hereinafter Vourlis).

Claims 5, 6, 12, 21, 22, 27, and 28 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Narukawa et al. in view of Vourlis and further in view of Narukawa et al. (U.S. Pat. No. 5,508,122, hereinafter Narukawa '122).

Claims 1, 8, 14, and 20 recite, in relevant part (emphasis added):

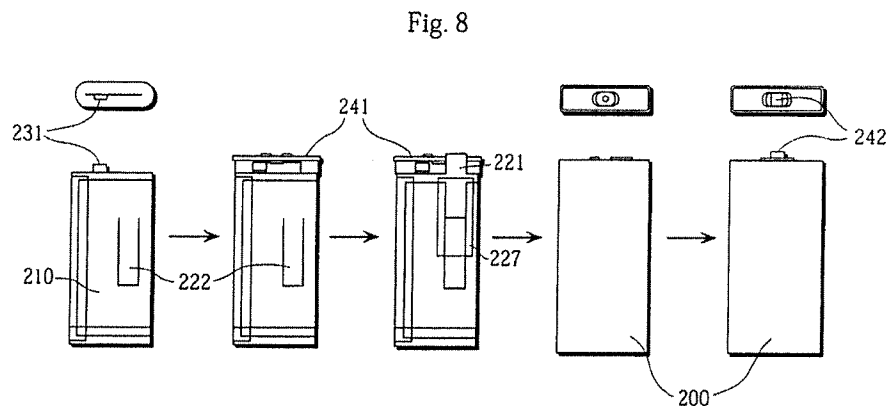
a cut that begins at the lower edge and extends more than half of the width of the first electrode

Page 3 of the Office action recites, in relevant part:

The positive electrode tab (222) is formed by folding a cut portion of an uncoated area of the positive current collector (224) toward an upper edge of the electrode (Figure 8).

Therefore, the "first electrode tab" appears to be equated with the "positive electrode tab 222" of Narukawa '133 and the "first electrode plate" appears to be equated with the "positive current collector 224".

FIG. 8 of Narukawa '133 is reproduced below:



Page 3 of the Office action goes on to state:

Narukawa et al. does not explicitly state that the cut portion begins at the lower edge of the current collector and extends along more than half the width; but Narukawa et al. teaches that the tab can be cut to size (col. 12 lines 42-44).

However, column 12, lines 42-44 of Narukawa merely recite (emphasis added):

If the positive electrode collector tab is too long, a portion thereof projecting from the upper face of the sealing plate is trimmed.

Therefore, the cited portions of Narukawa '133 do not appear to disclose or suggest at least the above recited limitations of claims 1, 8, 13, and 20 because the cited portion of Narukawa '133 merely appear to disclose that the end of the electrode tab can be cut off if it is "too long" and does not appear to disclose or suggest "a cut that begins at the lower edge and extends more than half of the width of the first electrode" of the claimed embodiments of claims 1, 8, 14, and 20.

In addition, claims 1, 8, 14, and 20 now recite, in relevant part:

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a fold extending from the side edge to the cut

Support for this amendment can be found, for example, in FIGS. 5 and 6C (reproduced below) of the application as filed.

FIG. 5

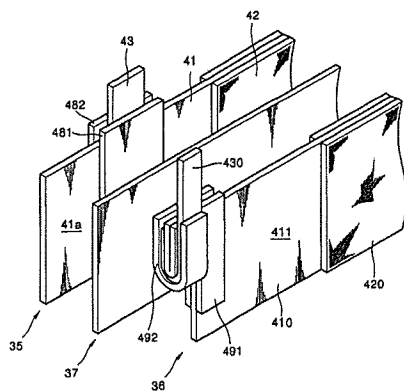
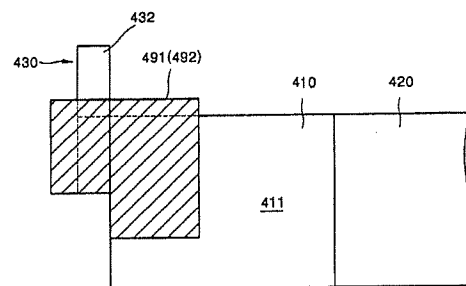
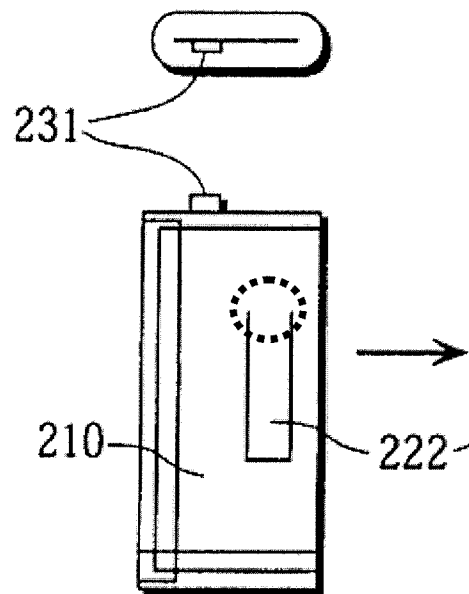


FIG. 6C



A portion of FIG. 8 of Narukawa '133 is annotated and reproduced below:



Applicants respectfully submit that a person of ordinary skill in the art would understand that the "positive electrode tab 222" would be folded in the circled region in the annotated

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version of FIG. 8 of Narukawa above, as described, for example, in column 12, lines 4–6 of Narukawa '133.

However, as shown in annotated portion of FIG. 8 of Narukawa '133 reproduced above, the folded portion of Narukawa '133 does not appear to be "a fold extending from the side edge to the cut" of the claimed embodiments of claims 1, 8, 14, and 20 because a portion of the distance between the "positive electrode tab 222" and the side edge would not be folded (e.g., the portion of the "positive current collector 224" to the right of the dotted circle).

Furthermore, Applicants respectfully submit that the addition of Vourlis and Narukawa '122 would not supply at least the above discussed deficiencies of Narukawa '133. Page 4 of the Office action appears to cite Vourlis merely for the proposition that "Vourlis discloses a wound electrode assembly with a tab located substantially in the center of the electrode unit and the second electrode tab partially overlapping and facing the other electrode tab (Figure 9)." Page 6 of the Office action appears to cite Narukawa '122 merely for the proposition that "Narukawa et al.'122 teach that the lead connecting regions, or electrode tabs, are covered with insulating tape.... Narukawa et al. '122 teach that each electrode tab positioned at the outmost has insulating tape on the side toward the center of the spiral electrode, or between the inner and outer surfaces of the first and second electrode tab...." In addition, Applicants respectfully submit that there is no apparent reason why a person of ordinary skill in the art at the time the invention was made would have combined Narukawa '133 with Vourlis and Narukawa '122 to arrive at the claimed embodiments of claims 1, 8, 14, and 20.

Therefore, Applicants respectfully request that the rejections of claims 1, 8, 14, and 20 be withdrawn and that these claims be allowed.

Because claims 2, 3, 5, 6, and 24–26, depend, directly or indirectly, from claim 1; claim 12 depends directly from claim 8; claim 27 depends directly from claim 14; and claims 21, 22, and 28 depend, directly or indirectly, from claim 20, they each incorporate all the terms and limitations of their respective base claim in addition to other limitations which further patentably distinguish these claims over the cited references. Therefore, Applicants respectfully request that

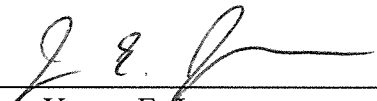
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the rejections of claims 2, 3, 5, 6, 12, 14, 21, 22, and 24–28 be withdrawn and that these claims be allowed.

Concluding remarks

In view of the foregoing remarks and amendments, Applicants earnestly solicit a timely issuance of a Notice of Allowance with claims 1–3, 5, 6, 8, 12, 14, 20–22, and 24–28. If there are any remaining issues that can be addressed over the telephone, the Examiner is cordially invited to call the Applicants' attorney at the number listed below.

Respectfully submitted,
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